

REMARKS

By the above amendment, independent claims 1, 2, 6 and dependent claim 7 have been amended to change the language of "based on" to "in accordance with" in an attempt to obtain proper consideration of the language of the independent and dependent claims of this application in relation thereto. That is, as clearly recited in independent claim 1 and the other independent and dependent claims of this application, the present invention includes "a control unit for controlling ON and OFF states of a light source for each of plural regions into which said lighting device is divided, in accordance with a display response of said liquid crystal display unit." (emphasis added). Again noting that previously the recitation was "based on a display response" (emphasis added) of the liquid display unit, which feature was not given proper consideration. Applicants submit that irrespective of the position set forth by the Examiner, the cited art does not disclose or teach the recited features of the independent and dependent claims of this application.

Before discussing the present invention and the cited art, applicants note that if the Examiner considers an interview to be helpful in resolving any outstanding issues, the Examiner is invited to contact the undersigned attorney to schedule an interview before taking action in response to the amendment presented herein.

The rejection of claims 1 - 5 and 8 - 9 under 35 USC 103 as being unpatentable over Hirai et al (USPN 6,122,021) in view of Brittell (USPN 5,749,646) and the rejection of claims 6 - 7 and 10 under 35 USC 103(a) as being unpatentable over Hirai et al (USPN 6,122,021) in view of Brittell (USPN 5,749,646) and Bibayan (USPN 5,572,648), such rejections are traversed insofar as they are applicable to the present claims and reconsideration and withdrawal of the rejections are respectfully requested.

Furthermore, such requirements have been clarified in the recent decision of In re Lee, 61 USPQ 2d 1430 (Fed. Cir. 2002) wherein the court in reversing an obviousness rejection indicated that deficiencies of the cited references cannot be remedied with conclusions about what is "basic knowledge" or "common knowledge".

The court pointed out:

The Examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is immaterial to patentability, and could not be resolved on subjected belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher."... Thus, the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion. (emphasis added)

As has previously been pointed out in the response filed July 21, 2003, the present invention is directed to a liquid crystal display apparatus which can smoothly display dynamic images, i.e., moving images without obscurity. As described, the present invention overcomes the disadvantages of the prior art wherein as recited in independent claims 1 and 6, and as illustrated in Figures 1 and 5 of the drawings of this application, there is provided a plurality of light sources in the form of lamps 51 which are arranged for each of plural regions (a, b, c), for example, and a control unit is provided for controlling ON and OFF states of a light source for each plural regions into which the lighting device is divided, in accordance with a display response of said liquid crystal display unit (claim 1) or in accordance with a result in said determination performed by said controller (claim 6) noting that claim 6 recites the

feature of dynamic images displayed. As noted above, the claims have been amended to utilize the terminology of "in accordance with" rather than "based on" in an attempt to obtain proper consideration for such claim language. Independent claim 2 recites the feature that the lighting device includes a light-adjustment unit for adjusting a quantity of light from the light source, which is transmitted to each plural region into which the lighting device is divided and a control unit for controlling each light-adjustment unit in accordance with a display response of the liquid crystal display unit. Thus, claim 2 like the other independent claims has been amended to utilize the terminology of "in accordance with" rather than "based on" in an attempt to obtain proper consideration of the recited features.

As further pointed out in the response filed July 21, 2003, Figures 6 - 8 of the drawings of this application show the control as effected by the present invention, wherein the lighting device which is divided into three regions a, b and c has lamps 51 in each region lighted after the scanning of each region and the response in the liquid crystals corresponding to that region have been completed, as described at page 10, lines 8 - 16 of the specification, wherein the region a, b and c are lighted after 12 ms, 15 ms and 18 ms, respectively, for 4.6 ms after the start of scanning of a portion corresponding to each region, of the liquid crystal display unit 2. As shown in Figure 8, the transmittance is the average value of the transmittance values of the three regions in the liquid crystal display unit 2 and the lamps 51 in each region of the lighting device 7 are controlled so as to be lighted after the transmittance of the liquid crystal display unit 2 has reached the saturation state. Thus, as described at page 11, lines 1 - 13 of the specification, with such conditions, even if dynamic images obtained by moving a static image at a visual-angle speed of 10°/s are displayed, there is no perceptible obscurity in the dynamic images, and the present

invention effects control in the manner defined in accordance with a display response of the liquid crystal display unit, as recited in each of the independent claims of this application, which features are not disclosed or taught in the cited art and which features cannot be ignored.

Turning to the rejections set forth by the Examiner, irrespective of the structural features contended by the Examiner to be present in Hirai et al, and recognizing, as pointed out by the Examiner that "Hirai does not disclose a lighting device that includes a plurality of light sources" applicants submit that Hirai et al also does not disclose or teach in the sense of 35 USC 103 "a control unit for controlling ON and OFF states of a light source for each of plural regions into which said lighting device is divided, in accordance with a display response of said liquid crystal display unit" (emphasis added) as recited in independent claim 1; "a control unit for controlling each light-adjustment unit in accordance with a display response of said liquid crystal display unit" (emphasis added) as recited in independent claim 2; nor "a control unit for controlling ON and OFF states of a light source for each of plural regions into which said lighting device is divided, when dynamic images are displayed in accordance with a result in said determination performed by said controller" (emphasis added) as recited in independent claim 6. Applicants submit that the Examiner cannot ignore the limitations of the independent and dependent claims and irrespective of the combination of Hirai et al with other cited art, applicants submit that Hirai et al taken alone or in combination does not disclose or teach in the sense of 35 USC 103, the claimed features of the independent and dependent claims of this application and all claims patentably distinguish thereover and should be considered allowable.

With respect to Brittell, the Examiner cites Brittell as disclosing the use of plural number of light sources utilized with respect to light generating units and suggests that it would be obvious to utilize the same with Hirai et al. Irrespective of this position by the Examiner, which applicants submit represents the principal of "obvious to try" which is not the standard of 35 USC 103, see In re Fine, supra, applicants submit that Brittell fails to disclose or teach the aforementioned features of independent claims 1, 2 and 6 with respect to the operation of a control unit operating in the manner defined in accordance with a display response of the liquid crystal display unit as recited in independent claims 1 and 2 and in independent claim 6 in relation to dynamic images being displayed. Such features are not disclosed or taught by Brittell in the sense of 35 USC 103, and applicants submit that irrespective of the position set forth by the Examiner, Brittell does not overcome the deficiencies of Hirai et al, as pointed out above. Thus, applicants submit that all claims present in this application patentably distinguish over the proposed combination of Brittell et al in the sense of 35 USC 103 and all claims should be considered allowable thereover.

As to the addition of Bibayan, the Examiner recognizes that neither Hirai et al nor Brittell teach a determining circuit determining whether the image signal to be displayed is for a static image of a dynamic image. However, the Examiner contends that Bibayan discloses a determination of the static image or dynamic image. Irrespective of this position by the Examiner, applicants admit that Bibayan fails to disclose or teach in the sense of 35 USC 103 taken alone or in combination with Hirai et al and Brittell, the recited feature of independent claim 6 and the dependent claims thereof in relation to a "control unit for controlling ON and OFF states of a light source for each of plural regions into which said lighting device is

divided, when dynamic images are displayed in accordance with a result in said determination performed by said controller." (emphasis added) Thus, here again, applicants submit that the proposed combination fails to provide the claimed features as set forth in the independent and dependent claims of this application in the sense of 35 USC 103 and all claims patentably distinguish over this proposed combination of references and should be considered allowable thereover.

As pointed out above, none of the cited art teaches the on/off control in accordance with a display response as recited in the independent and dependent claims of this application whereby an improvement in the quality of moving images, i.e., dynamic images, and additionally extension of life of the light source can be achieved.

With respect to the features of the dependent claims, irrespective of the position set forth by the Examiner, the dependent claims recite additional features when considered in conjunction with the parent claims which further patentably distinguish over the cited art such that all claims present in this application patentably distinguish over the cited art in the sense of 35 USC 103 and should be considered allowable thereover.

Again, applicants request the Examiner to contact the undersigned attorney to schedule an interview, in order to clarify any outstanding issues, although applicants submit that in light of the amendments and arguments presented, there can be no question that the cited art fails to disclose or teach the recited features of the independent and dependent claims of this application.

For the foregoing reasons, applicants submit that all claims present in this application should now be in condition for allowance and issuance of an action of a favorable nature is courteously solicited.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 503.38382X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

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